

Title (en)  
A radar system.

Title (de)  
Radarsystem.

Title (fr)  
Système radar.

Publication  
**EP 0276885 A1 19880803 (EN)**

Application  
**EP 88200090 A 19880120**

Priority  
SE 8700329 A 19870128

Abstract (en)

The invention relates to a radar system comprising a transmitter with a periodically tunable HF-transmitter tube, as a magnetron with rotating tuning body, and a receiver with a mixing stage, in which echo pulses caused by transmitted radar pulses are mixed with the output signal from a local oscillator, whose frequency can be controlled. During transmission the tuning frequency of the transmitter tube is varied periodically and in an interval before triggering the local oscillator is "slaved" to the transmitter tube, so that the local oscillator frequency follows the variations in the tuning frequency. In the triggering moment the local oscillator is locked in frequency to the value prevailing in the triggering moment. According to the invention this system is combined with a frequency predicting circuit, which mainly consists of a comparator. In this comparator the control signal of the local oscillator, which due to the said "slaving" represents the instantaneous tuning frequency, is compared with a reference signal. The transmitter tube is triggered when the two compared signals are in a given relationship to each other, e.g. equal. Hereby, the transmitter tube is brought to produce a radar pulse having a predicted frequency, which is mainly determined by the said reference signal.

IPC 1-7  
**G01S 13/24**; **G01S 7/28**

IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)

- SE 328922 B 19700928 - PHILIPS SVENSKA AB [SE]
- US 3611380 A 19711005 - CARLSSON NILS RUNE
- SE 317417 B 19691117 - PHILIPS SVENSKA AB [SE]
- US 4538149 A 19850827 - WEHNER DONALD R [US]

Cited by  
EP0933647A4; WO8904974A1

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